

## VI. What is claimed is:

1. One novel compound: Iodine acetamido benzoyl ethyl acetate.
2. Halogenated acetamido benzoyl ethyl acetate derivatives that covalently bind to tubulin.
3. Tubulin ligands with a G1/S-phase arrest mechanism of anti-cancer activity.
4. Tubulin ligands that cause a rapid and biphasic phosphorylation of bcl-2.
5. In combination with claims 1 through 4 and bromine acetamido benzoyl ethyl acetate: Compounds that have therapeutic potential in cancer treatment.
6. In combination with claims 1 through 4 and bromine acetamido benzoyl ethyl acetate: Compounds that may have therapeutic potential in treating other diseases such as fungal and parasitic infections or malaria.
7. In combination with claims 1 through 4 and bromine acetamido benzoyl ethyl acetate: Compounds that may have therapeutic potential in treating other indications such as gout, restenosis, multiple sclerosis, Parkinsons's and Alzheimer's diseases.